

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: RTSP-0283
Inventors: Monia and Cowsert
Serial No.: Not Yet Assigned
Filing Date: Herewith
Examiner: Not Yet Assigned
Group Art Unit: Not Yet Assigned
Title: Antisense Modulation of P13 Kinase P110
Beta Expression

#6/I.D.S.

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for Patents, Washington, D.C. 20231

By Jane Massey Licata
Typed Name: Jane Massey Licata, Reg. No. 32,257

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R.
§§1.97-1.98, information relating to the above-identified
application is hereby disclosed. Inclusion of information in
this statement is not to be construed as an admission that this
information is material as that term is defined in 37 C.F.R.
§1.56(b).

(XX) In accordance with §1.97(b), since this Information
Disclosure Statement is being filed either within three
months of the filing date of the above-identified

application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

- () In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:
- () Certification in Accordance with §1.97(e) is set forth below; or
- () The fee of \$180.00 as set forth in §1.17(p) is attached.
- () In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(i)(1).
- () Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.

(XX) In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified) are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. 09/392,350, filed September 9, 1999, for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

() The relevance of the listed references in a foreign language is as stated in the specification at pages @@.

(XX) All listed references are in the English language.

Respectfully submitted,

Jane Massey Licata

Jane Massey Licata
Registration No. 32,257

Date: March 8, 2002

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Form PTO-1449 Modified		Docket No. RTSP-0283	Serial No. Not Yet Assigned
List of Patents and Publications Cited by Application (Use several sheets if necessary)		Applicant Monia and Cowsert	
		Filing Date Herewith	Group Not Yet Assigned
U.S. Department of Commerce Patent and Trademark Office			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AA	Deora et al., A redox-triggered ras-effector interaction. Recruitment of phosphatidylinositol 3'-kinase to Ras by redox stress, J. Biol. Chem., 1998, 273:29923-29928	
	AB	Fry, Structure, regulation and function of phosphoinositide 3-kinases, Biochim. Biophys. Acta., 1994, 1226:237-268	
	AC	Graness et al., A novel mitogenic signaling pathway of bradykinin in the human colon carcinoma cell line SW-480 involves sequential activation of a Gq/11 protein, phosphatidylinositol 3-kinase beta, and protein kinase Cepsilon, J. Biol. Chem., 1998, 273:32016-32022	
	AD	Hu et al., Cloning of a novel, ubiquitously expressed human phosphatidylinositol 3-kinase and identification of its binding site on p85, Mol. Cell. Biol., 1993, 13:7677-7688	
	AE	Molz et al., Cpk is a novel class of Drosophila PtdIns 3-kinase containing a C2 domain, J. Biol. Chem., 1996, 271:13892-13899	
	AF	Schu et al., Phosphatidylinositol 3-kinase encoded by yeast VPS34 gene essential for protein sorting, Science, 1993, 260:88-91	
	AG	Stirdivant et al., Cloning and mutagenesis of the p110 alpha subunit of human phosphoinositide 3'-hydroxykinase, Bioorg. Med. Chem., 1997, 5:65-74	
	AH	Stoyanov et al., Cloning and characterization of a G protein-activated human phosphoinositide-3 kinase, Science, 1995, 269:690-693	
	AI	Ui et al., Wortmannin as a unique probe for an intracellular signalling protein, phosphoinositide 3-kinase, Trends Biochem. Sci., 1995, 20:303-307	
	AJ	Vanhaesebroeck et al., P110delta, a novel phosphoinositide 3-kinase in leukocytes, Proc. Natl. Acad. Sci. U. S. A., 1997, 94:4330-4335	

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Form PTO-1449 Modified List of Patents and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce		Docket No. RTSP-0283	Serial No. Not Yet Assigned
		Applicant Monia and Cowsert	
		Filing Date Herewith	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
/	AK	Vlahos et al., "A specific inhibitor of phosphatidylinositol 3-kinase, 2-(4-morpholinyl)-8-phenyl-4H-1-benzopyran-4-one (LY294002), J. Biol. Chem. 1994 269:5241-5248	
	AL	Woscholski et al., "A comparison of demethoxyviridin and owrtmannin as inhibitors of phosphatidylinositol 3-kinase, FEBS Lett. 1994 342:109-114	
/	AM	Milner et al., "Selecting effective antisense reagents on combinatorial oligonucleotide arrays", Nature Biotechnolgy 1997 15:537-541	
EXAMINER		DATE CONSIDERED	

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Form PTO-1449 Modified				Docket No. RTSP-0283		Serial No. Not Yet Assigned	
List of Patents and Publications Cited by Applicant (Use several sheets if necessary)				Applicant Monia and Cowsert			
				Filing Date Herewith		Group Not Yet Assigned	
U.S. Department of Commerce Patent and Trademark Office							
U. S. PATENT DOCUMENTS							
Examiner		Document	Date	Name	Class	Subclass	
	AA	5,776,689	7-7-98	Karin et al.	435	6	
	AB	5,801,154	9-1-98	Baracchini et al.	514	44	
FOREIGN PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Country	Translation YES NO		
EXAMINER				DATE CONSIDERED			